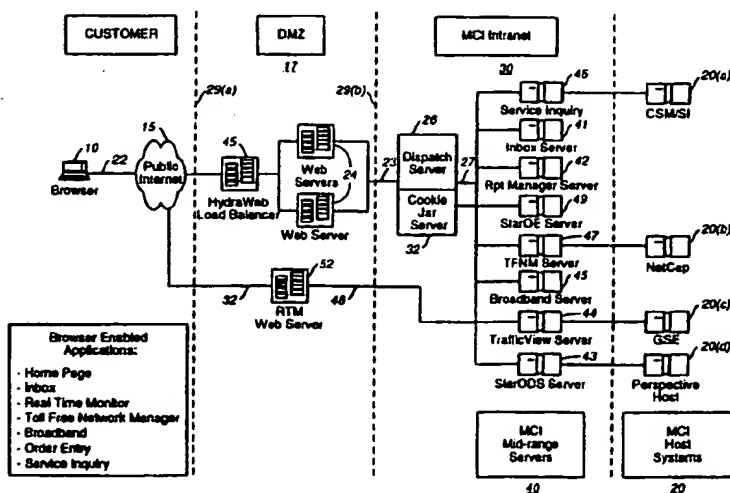




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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**(54) Title:** SECURE CUSTOMER INTERFACE FOR WEB-BASED DATA MANAGEMENT**(57) Abstract**

An integrated series of security protocols is disclosed that protect remote user communications (22) with remote enterprise services, and simultaneously protect the enterprises services from third parties. In the first layer, an implementation of the Secure Sockets Layer (SSL) version of a HTTPS provides communications security, including authentication of the enterprise web server and the security of the transmitted data. The protocols provide for an identification of the user, and an authentication of the user to ensure the user is who he/she claims to be and a determination of entitlements that the user may avail themselves of within the enterprise system. Session security is described, particularly as to the differences between a remote user's copper wire connection to a legacy system and a user's remote connection to the enterprise system over a "stateless" public Internet (15), where each session is a single transmission, rather than an interval of time between logon and logoff, as is customary in legacy systems. Security for the enterprise network and security for the data maintained by the various enterprise applications is also described.

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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US98/20158

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(6) : H01J 13/00 US CL : 395/200.59 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 395/200.59; 395/187.01; 395/609; 395/200.79; 395/200.32; 395/200.12 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) INTERNET, APS		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	TAMEMBAI,, ANDREW S., Computer Networks, Prentice Hall, 1996, p. 410-412.	1-36
Y	WO 97/16911, A (GORE), 09 May 1997 (09.05.97) p. 2 ll. 4-40.	1-36
Y,P	US 5,802,320 A (BAEHR et al) 01 SEPTEMBER 1998 (01.09.98) fig 6, fig 9.	1-36
Y,P	US 5,805,803, A (BIRRELL et al) 08 SEPTEMBER 1998 (08.09.98), fig. 1.	1-36
Y,P	US 5,826,029, A (GORE et al), 20 OCTOBER 1998 (20.10.98) fig. 4A.	1-36
Y,P	US 5,793,964 A (ROGERS et al.) 11 AUGUST 1998 (11.08.98) fig. 11.	1-36
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Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230		Authorized officer GLENTON BURGESS <i>James R. Matthews</i> Telephone No. (703) 305-4792

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P	US 5,708,780 A (LEVERGOOD et al.) 13 JANUARY 1998 (13.01.98), fig. 3.	1-36
Y,P	US 5,815,665 A (TEPER et al.) 29 SEPTEMBER 1998 (29.09.98) fig. 1.	1-36